

FORM PTO-1449		ATTY. DOCKET NO. 270/219	SERIAL NO. 10/046,071
STATE OF PATENTS AND OTHER ITEMS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		APPLICANT: O'CONNOR, Stephen D. et al.	
		FILING DATE: January 11, 2002	GROUP: 1723 1/3 pp



U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
	A1	6,537,506 B1	3/25/2003	Schwalbe et al.	422	130	2/3/2000
	A2	2002/0192701 A1	12/19/2002	Adey	435	6	8/2/2002
	A3	6,494,614 B1	12/17/2002	Bennett et al.	366	336	9/21/1999
	A4	6,482,306 B1	11/19/2002	Yager et al.	204	600	9/22/1999
	A5	6,409,832 B2	6/25/2002	Weigl et al.	117	206	3/30/2001
	A6	2002/0076350 A1	6/20/2002	Weigl et al.	422	58	9/18/2001
	A7	2002/0048535 A1	4/25/2002	Weigl et al.	422	100	9/18/2001
	A8	2001/0048900 A1	12/6/2001	Bardell et al.	422	100	5/23/2001
	A9	2001/0048637 A1	12/6/2001	Weigl et al.	366	341	5/24/2001
	A10	6,287,520 B1	9/11/2001	Parce et al.	422	100	1/21/2000
	A11	6,235,471 B1	5/22/2001	Knapp et al.	435	6	4/3/1998
	A12	6,193,471 B1	2/27/2001	Paul	417	53	6/30/1999
	A13	6,186,660 B1	2/13/2001	Kopf-Sill et al.	366	340	7/26/1999
	A14	5,945,203	8/31/1999	Soane	428	209	10/14/1997
	A15	5,932,799	8/3/1999	Moles	73	53.01	7/21/1997
	A16	5,932,315	8/3/1999	Lum et al.	428	172	4/30/1997
	A17	5,904,824	5/18/1999	Oh	204	601	3/7/1997
	A18	5,882,571	3/16/1999	Kaltenbach et al.	264	400	3/27/1997
	A19	5,882,465	3/16/1999	McReynolds	156	285	6/18/1997
	A20	5,872,010	2/16/1999	Karger et al.	436	173	7/3/1996
	A21	5,849,208	12/15/1998	Hayes et al.	216	94	9/7/1995
	A22	5,658,515	8/19/1997	Lee et al.	264	219	9/25/1995
	A23	5,640,995	6/24/1997	Packard et al.	137	597	3/14/1995
	A24	5,545,367	8/13/1996	Bae et al.	264	401	5/27/1993

EXAMINER: T. Soohoo	DATE CONSIDERED: 7-15-2004
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U.S. PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
Chris. Oberer TGS	A25	5,443,890	8/22/1995	Ohman	428	167	2/4/1992
	A26	5,385,709	1/31/1995	Wise et al.	422	98	6/24/1993
	A27	5,376,252	12/27/1994	Ekström et al.	204	299 R	11/10/1992
	A28	5,230,866	7/27/1993	Sharde et al.	422	103	3/1/1991
	A29	5,222,808	6/29/1993	Sugarman et al.	366	274	4/10/1992
	A30	5,194,133	3/16/1993	Clark et al.	204	299 R	5/3/1991

FOREIGN PATENT DOCUMENTS

EXAMINER INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	NAME	TRANSLATION? YES NO
All considered TGS	B1	WO 02/10732 A1	2/7/2002	WIPO	Ausserer et al.	
	B2	WO 00/22436	4/20/2000	WIPO	McNeely et al.	
	B3	WO 00/21659	4/20/2000	WIPO	Burdon et al.	
	B4	EP 0 933 126 A1	8/4/1999	EPC	Winkler et al.	
	B5	WO 99/17093	4/8/1999	WIPO	Handique et al.	
	B6	EP 0 107 631 A2	5/2/1984	EPC	Ruzicka et al.	

NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

EXAMINER INITIALS		NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)
All considered TGS	C1	Stroock, Abraham D. et al., "Chaotic Mixer for Microchannels," Science Magazine, Vol. 295, pp. 647-651, January 25, 2002
	C2	Liu, Robin H. et al., "Plastic In-Line Chaotic Micromixer for Biological Applications," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001 Kluwer Academic Publishers, The Netherlands, pp. 163-164
	C3	Jacoby, Mitch, <i>Chemistry Flows Like Clockwork - Flow system used to make simple devices for time-dependent studies</i> , "Chemical & Engineering News," February 24, 2003, p.5
	C4	Deahmukh, Ajay A. et al., A.P. (2000), "Continuous Micromixer with Pulsatile Micropumps," Solid-State Sensor and Actuator Workshop, Hilton Head Island, SC, USA, 4-8 June 2000, pp. 73-76
	C5	Martin, P.M. et al., <i>Laser micromachined and laminated microchannel components for chemical sensors and heat transfer applications</i> , "Micromachined Devices and Components III," SPIE - The International Society for Optical Engineering, Vol. 3224, Bellingham, Washington, USA, pp. 258-265
	C6	Tracey, M.C. et al., "Microfluidic Mixer Employing Temporally-Interleaved Liquid Slugs and Parabolic Flow," <i>Micro Total Analysis Systems</i> , J.M. Ramsey and A. van den Berg (eds.), 2001 Kluwer Academic Publishers, The Netherlands, pp. 141-142

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EXAMINER INITIALS	NON PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)
	C7 Ehrfeld, W. et al., <i>Potentials and Realization of Microreactors</i> , "DECHEMA Monographs," Vol. 132, VCH Verlagsgesellschaft, 1996, pp. 1-28.
	C8 Johnson, Timothy J. et al., <i>Rapid Microfluidic Mixing</i> , "Analytical Chemistry," Vol. 74, No. 1, January 1, 2002, pp. 45-51.
	C9 Verpoorte, Elisabeth M.J. et al., "Silicon-Based Chemical Microsensors and Microsystems," <i>Interfacial Design and Chemical Sensing</i> , American Chemical Society, 1994, Chapter 21, pp. 244-254.
	C10 Yang, Xing et al., "A MEMS Thermopneumatic Silicone Membrane Valve," (1998) <i>Sensors and Actuators A: Physical</i> , Vol. 64, pp. 101-108.
	C11 Schulte, Thomas, "The Development of Practical Microfluidic-Based Systems for Chemical and Blood Analysis," (1999) in <i>Drug Discovery Technology for the New Millennium</i> Chapter 13, pp. 127-135. Conference proceeding: IBC USA Conferences, Inc.: 4 th Annual Conference on Microfabrication and Microfluidic Technologies.
	C12 Becker, Holger et al., "Silicon as Tool Material for Polymer Hot Embossing," (1999) <i>Proceedings MEMS '99</i> Orlando, 228-231.
	C13 Jeon, Noo Li et al., "Large-Area Patterning by Vacuum-Assisted Micromolding," (1999) <i>Adv. Mater.</i> 11, No. 11:946-950.
	C14 Jackman, Rebecca J., et al., "Electrochemistry and soft lithograph: A route to 3-D microstructures", (May 1999) <i>Chemtech</i> 18-30.
	C15 Folch, A., et al., "Molding of Deep Polydimethylsiloxane Microstructures for Microfluidics and Biological Applications" (Feb 1999) <i>Journal of Biomechanical Engineering</i> 121:28-34.
	C16 Duffy, David C., et al., "Rapid Prototyping of Microfluidic Systems in Poly(dimethylsiloxane)", (Dec 1998) <i>Analytical Chemistry</i> 70:4974-4984.
	C17 Grzybowski, B. A., et al., "Generation of Micrometer-Sized Patterns for Micranalytical Applications Using a Laser Direct-Write Method and Microcontact Printing", (Nov 1998) <i>Analytical Chemistry</i> 70:4645-4652.
	C18 Gonzalez, C., et al., "Fluidic Interconnects for modular assembly of Chemical Microsystems", (Jan 1998) <i>Sensors and Actuators B</i> 49:40-45.
	C19 Qin, Dong, et al., "Microfabrication, Microstructures and Microsystems", (1998) <i>Topics in Current Chemistry</i> 194:1-19.
	C20 Fuhr, G., et al., "Biological Application of Microstructures", (1998) <i>Topics in Current Chemistry</i> 194:83-116.
	C21 Cordova, Emilio, et al., "Noncovalent Polycationic Coatings for Capillaries in Capillary Electrophoresis of Proteins" (April 1997) <i>Analytical Chemistry</i> 69:1370-1379.
	C22 McCormick, Randy M., et al., "Microchannel Electrophoretic Separations of DNA in Injection-Molded Plastic Substrates" (Dec 1997) <i>Analytical Chemistry</i> 69:2626-2630.
	C23 Martynova, Larisa et al., "Fabrication of Plastic Microfluid Channels by Imprinting Methods" (1997) <i>Anal. Chem.</i> 69:4783-4789.
	C24 Kovacs, Gregory T.A., et al., "Silicon Micromachining Sensors to Systems" (July 1996) <i>Analytical Chemistry News & Features</i> 407A-412A.
	C25 Shoji, Shuchi, et al., "Microflow Devices and Systems" (Oct 1994) <i>J. Micromech. Microeng.</i> 4:157-171.
	C26 Schomburg, W.K., et al., "Microfluidic Components in LIGA Technique" (Feb 1994) <i>J. Micromech. Microeng.</i> 4:186-191.
	C27 Verpoorte, Elisabeth M.J., et al., "Three-Dimensional Micro Flow Manifolds for Miniaturized Chemical Analysis Systems" (Oct 1994) <i>J. Micromech. Microeng.</i> 4:246-256.

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